DOCUMENT RESUME

ED 260 808 PS 015 277

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TITLE Gateway to Lessons: The Call to Lesson, Enabling and Disabling Functions.
PUB DATE Mar 85
NOTE 24p.; Paper presented at the Annual Meeting of the American Educational Research Association (69th, Chicago, IL, March 31-April 4, 1985).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Classroom Communication; Classroom Observation Techniques; Classroom Research; *Classroom Techniques; Elementary Education; *Elementary School Students; *Elementary School Teachers; Ethnography; Qualitative Research; Small Group Instruction; Student Behavior; *Teacher Behavior; *Time Factors (Learning); Time on Task; Videotape Recordings
IDENTIFIERS Coding; *Transition Activities (Classroom)

ABSTRACT

An ethnographic study was made of the portion of pre-lesson transition activity, the call to lesson time (CTL), devoted to "setting up" lessons in elementary classrooms. Participants were two teachers and 62 elementary school students in two classrooms: a grade 1-3 open classroom and a traditional third grade classroom. Videotapes of 7.5 months of classroom activities provided a record of 105 lessons. Qualitative analysis of the data used Mehan's method of analytic induction combined with Barnlund's theory of meaning. Measures coded included time spans, the cast of characters, and who said what to whom. These later data were then coded for communication content, initiator and recipient of contact, and classroom "climate." In addition, data on lessons were coded for various time and time-on-task measures, and the development of the organizational system in each class was traced. A small set of recursive rules incorporating all the data were derived, various quantitative tests were run on the data from CTLs and lessons, and a statistical description of the classroom events emerged. An experimental intervention, undertaken to enrich the data, provided additional, strikingly dramatic data about the nature of the relationship of CTL to lesson. It is concluded that the little event called CTL has more complexity and power than traditional wisdom suggests. (RH)

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GATEWAY TO LESSONS: THE CALL TO LESSON, ENABLING AND DISABLING FUNCTIONS

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March, 1985

GATEWAY TO LESSONS: THE CALL TO LESSON

Leona Sidman-Phillips

The descriptive data presented in this paper are taken from a large-scale study examining classroom transition activity before lesson time in elementary classrooms. The work focuses on the time when both students and teachers move from one set of activities (an event) to another; here, pre-lesson transition activities to the small group lesson. The central focus of the work is that portion of a pre-lesson transition devoted to "setting up" the lesson (Cahir, 1978; Mehan, 1979). The transition time period devoted to these activities is hereafter named the call to lesson time (CTL). Rationale for the work is the notion that the opportunity to learn in school is enabled or disabled by the subtle daily change of the classroom. Thus, we need to be able to describe the "doings" and be able to analyze the interrelatedness between transitions and lessons. Indeed, we have ample evidence from a variety of perspectives that getting the bodies in the door is not enough (Coleman et al., 1966; Jencks, 1972; Mosteller and Moynihan, eds., 1972; Illich, 1972; Ogbu, 1978; and a host of others).

While the larger study minutely examines the interrelatedness of the CTL to small group teacher-led instruction, this paper focuses on the presentation of a description of the natural (chronological) flow of events leading to this type of a formal lesson. The lesson itself is also examined and some patterns about a relationship between the CTL and lesson are suggested. The paper concludes with a discussion of some

challenges to traditional views of transition time and time-on-task.

An experimental intervention, undertaken in order to enrich the data, provides additional information about the nature of the relationship of CTL to lesson. These data are strikingly dramatic.

Since transition activities are relatively understudied, some basic baseline information about CTLs is necessary and the building of a hypothesis about their relationship to lessons is critical to our understanding of how classroom organizational structure enables or disables learning opportunities.

Method

Subjects and Setting

The participants were two teachers and sixty-two female and male elementary school students constituting two classrooms. One classroom of thirty-one students was a grade 1-3 open classroom; the other thirty-one students were in a traditional third grade classroom. Both classes were in the same school with analogous socioeconomic and ethnic factors in each room. The teachers were of similar age and each had been teaching over twenty years.

Pilot work[1] the previous spring (with these teachers) revealed that the social order in each classroom included small group lessons and CTL time, as do most elementary classrooms in North America.

Procedure

Activities in two elementary classrooms were videotaped for a total of 7.5 months (105 lessons). The in-class non-participant observer and the video technician came to the school each day before school began and set up the equipment so that data was collected from the moment the children entered the room until the end of the time allotted to small group lessons for the day. Ethnographic methodology was utilized for data collection and the qualitative analysis of data used Mehan's method of analytic induction (1979) combined with Barnlund's theory of meaning (1957).[2]

Prior to the school's opening in the fall, the research team spent a day in each classroom helping the teacher re-open the room, and negotiated camera paths, locations appropriate for the equipment that would allow anpropriate movement. We also helped the teachers become acquainted with the equipment: a portable video camera, recorder, microphone attachment, etc. It was also requested that the teacher(s) treat us as "flies on the wall" and we said that we would be available for conversation at lunch time or in the evenings but not during class time. Prior to the first day of class, the principal had sent a note home to parents of the students informing them of the research and welcoming questions.

Each teacher had voluntarily agreed to participate in the study in response to the principal's description of the work and request for volunteers. The work had been described as the author wanting to learn

more about what really happens in classrooms by seeing it on tape. Each of the teachers in the study agreed to be the randomly selected teacher who got to review his/her tapes in late December and then to participate in the conjoint planning of a "refinement" to his/her teaching. The other teacher got to review his/her tapes in June. A coin toss in late November determined that the teacher of the traditional classroom would be the December reviewer,[3] hereafter teacher A.[4]

Three persons were trained to code the videotape data. The tapes were coded three days a week beginning in early October. Inter-rater reliability between coders was in the high nineties.

Coding

Each tape was reviewed by the coders for about twelve person hours and coordinated with the observer's notes. The data were treated sequentially in their naturally occurring order. Codings of time spans were the initial measures followed by a recording of the cast of characters: who said what to whom. These latter data were then coded for the type of communication (content), who initiated the contact, the receiver, etc. The "climate" of the classroom was also noted by the observer at various time intervals.

In addition, data on lessons were coded for various time and time-on-task (TOT) measures (allotted time, utilized time, and amount of sustained TOT prior to an interruption to the group's task).

The development of the organizational system in each class was traced from the data. This, coupled with the time spans and content of each event, yielded a full description of each class. These two

descriptions were compared for the purpose of noting common elements shared by the classes. In the end, every set of activities was accounted for as belonging to the general social order of these elementary classrooms. Following Mehan's methods, a small set of recursive rules (patterns) that incorporated all the data were derived. Various quantitative tests were run on the data from CTLs and lessons and a statistical description of the events emerged.

Results

About the CTL: Basic Information

Call-to-Lesson Time is initiated by the signal (verbal/non-verbal) that a lesson is the next formalized event and is ended by the signal (verbal/non-verbal) that the lesson is beginning. CTLs are chunks of time occurring within the pre-lesson transition period, or can constitute the whole pre-lesson transition. As part of the whole, they are called "embedded" in this study.

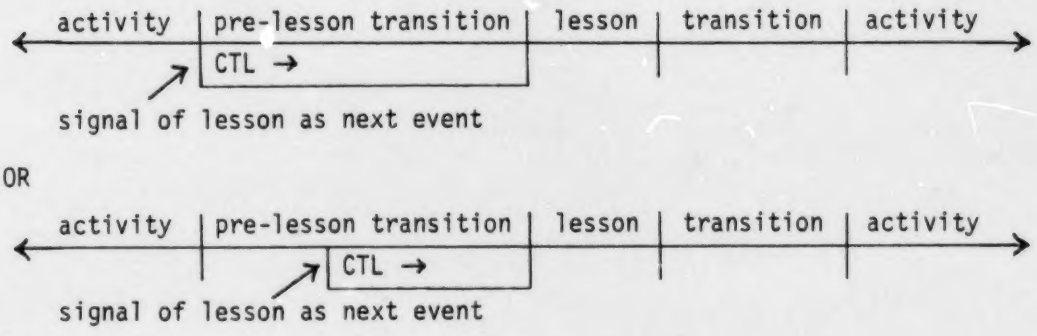

Figure 1. Placement of a CTL

The beginning of a CTL constitutes the potential for a formalized focus for classroom members. Baseline statistical data describing this event are summarized below (minutes:seconds):

TABLE 1

RANGE OF TIME USED FOR CTL

VARIABLE	TIME RANGE
Total Range	0:39 - 5:21
Over 50% of CTLs	1:00 - 3:00

N = 100

TABLE 2

COMPARISON OF CLASSROOMS A AND B:
CTL TIME ALLOTMENT

CLASS	N	MEAN	ST. DEV.	ST. ERROR
A	31	2:32	:59	:11
B	18	2:02	:42	:10

Grand Mean = 2:17

H_0 : no difference F = 2.27 d.f. = 30, 17 p = .045 reject at .05

H_0 : no difference t = 2.06 d.f. = 45, 1 p = .02 reject at .05

While there was a statistically significant difference between the mean amount of CTL time, in practical terms we are talking about a total time span of under five and one-half minutes in all cases. An ANOVA between CTLs within classroom comparison (each class separately) revealed no significant difference between the means of CTLs within each classroom. Furthermore, there was no significant difference in scores using a 2 sample t test for matched pairs between the mean length of CTLs prior to small groups from part 1 (September to December) to part 2 (January to March) in the control classroom, B.[5] This indicates that we may believe the amount of time devoted to the CTL stays relatively steady over the course of the school year. The experimental class, A, where an intervention to the CTL was implemented, also showed no significant difference between the time allotted to CTLs from part 1 (pre) to part 2 (post) of the study.

TABLE 3

PRE: POST COMPARISON OF DIFFERENCE SCORES
OF TIME ALLOTTED TO CTL

CLASSROOM VARIABLE	N(PAIRS)	T	P>(T)	SIGNIFICANCE/ NONSIGNIFICANCE
B/CONTROL CTL	15	-.96	.353	N.S.
A/EXPERIMENTAL CTL	15	.35	.733	N.S.

Other descriptive data are briefly summarized below.

Student ↔ teacher contact during the CTL was coded and fell into three categories: (1) teacher initiated disciplinary contact, (2) teacher initiated non-disciplinary contact, and (3) student initiated contact with the teacher. In all cases of CTLs observed, there was type 2 or 3 contact. The average number of contacts in a CTL (part 1) was 3.4 in classroom A (N = 30) and in classroom B (part 1) the average number of contacts was 5.2 (N = 29).

- All CTLs contained at least one teacher directive (verbal/non-verbal) responded to by the vast majority of the classroom members.
- All CTLs contained large and small scale proxemic shifts whether or not the individual was to be directly involved in the next lesson.
- Students could name the time period we came to call the CTL. On a "fun day" they saw tapes of themselves and answered questions on index cards about "What's happening now?" as we froze the tapes which were run without sound. Later that day, they saw more tape with sound, but we only collected data for the first review time span.
- All CTLs were marked by a direct signal, initiated initially by the teacher in an overt way, but later in the semester got covert, in some instances, and taken over by students in other instances.
- All the basic features that occurred in classroom A CTLs also occurred in classroom B although there were the

following differences:

(a) statistically significantly more time allotted to CTLs in A than B;

(b) more deviation in the amounts of time allotted to CTLs within A.

- All our data indicate that the general features of the CTL were equivalent, that it is a marked and bounded event with purpose. These features corroborate those noted by Cahir (1978).

About the Small Group Lessons: Coded Features

The small group lesson segments of the videotapes were analyzed for potential academic time (PAT), the time the teacher put aside for the lesson; the actual sustained academic time (SAT), the time utilized by the group for on-task lesson time (TOT)--a summing of segments often punctuated by "breaks"; and, the chunk of time that the lesson was ongoing before an interruption (a break) due to disruptive activities of non-group members. Minimally, if three or more group members were off-task the group was considered disrupted. This eliminated the need to code individual group member's behavior. Usually one individual's behavior in isolation did not take a group off task in any significant way in either class; e.g., the reader kept reading while the behavior was attended to by the group leader (teacher).

Within class, between group comparisons (F and t tests for independent groups) revealed that there were no significant differences between the groups in each class (using an .05 level); therefore, within

class group data was lumped in the analyses.

TABLE 4

GRAND MEAN OF PAT AND SAT COMBINED GROUPS
IN CLASSROOMS A AND B

CLASSROOM	VARIABLE	N	MEAN	PERCENT OF PAT USED BY GROUP
A	PAT	31	17:42	
A	SAT	31	14:22	.799 (about 20% of time off-task)
B	PAT	24	14:12	
B	SAT	24	14:02	.976 (about 2% of time off-task)

TABLE 5

MEAN CHUNK OF SAT BEFORE A DISRUPTIVE BREAK:
CLASSROOMS A AND B

CLASSROOM	N(GROUPS)	MEAN	ST. DEV.	ST. ERROR
A	21	2:35	1:04	:14
B	24	12:50	5:11	1:29

H_o : no difference

F = 19.72 p = .0001

t = -6.75 p = .0001

Note: Class A's groups had a mean time of 2:35 before a break. This represents a very staccato pattern of time-on-task. The sum of these chunks did account for 80% usage of time allotted, however. Class B had slightly shorter groups in general and longer chunks of sustained time before a break (mean of 12:50). Overall, about 98% of the allotted time was utilized as on task time. (These data are for part 1 of the study.)

A Second Tier of Data Analysis

Questions about the content of the CTL emerged once the baseline data was assembled. In general, we had established that the features of the CTL were analogous across classes; but what specifically differed to account for the large discrepancy of SAT patterns? We decided to take a closer look into CTLs since the task content of the groups seemed also analogous (same books, etc.).

The specific content of the contact within CTLs was coded (see page 8 for definitions of data categories) in the first level of analysis. These data were examined again in conjunction with a management style survey we had conducted. It was noted that in classroom A the frequency of teacher-initiated behavior predominated (71%). The class was adult centered which was consonant with the teacher's style as expressed on the LIFO survey.[6] In addition, there was much more verbal signalling in this this classroom in contrast to the tapes of the other class. Verbal: non-verbal comparisons were not statistically analyzed. In classroom B, 44% of the contact was student initiated and 20% was teacher-initiated disciplinary. This presents a picture of an almost even balance of teacher-initiated non-disciplinary contact and student to teacher contact.

This also was consistent with the LIFO data on management style. However, management style alone cannot account for the discrepancies because there was a specific content difference which emerged from the data. When the data were coded for the frequency of certain specific categories of content (emically derived), these patterns emerged:

Teacher B always included three categories of activities in the CTL. The activities are: clarifying that, and where, a new and valued activity is to begin; selecting the roles of the participants, and indicating the responsibilities of the non-group members, and facilitating the student's needs, attending to classroom "business" (e.g., aide's work, etc.) and sometimes creating new rules focused on the facilitation of students' needs or clarifying old rules (e.g., for bathroom or pencil sharpening). Work checks, praise or comment (managerial moves) and a general "pulse taking" of the climate always took place.

The stability of these patterns provided a base for looking at classroom A where on the surface it seemed that there were no consistent patterns. That turned out not to be true, but at this point it is more useful to discuss classroom A, part 1, in light of the three factors above. Teacher A would often clarify that a new activity was to begin; he always selected the group participants (calling them by their names--in B they were called by a group name; e.g., "red" group, etc.) and then he would usually stand by his desk waiting for the group to assemble.[7] The most frequent (most valued?) activity in classroom A was a request for students to keep quiet. Over fifty percent of the teacher-initiated contact was such an injunction. The teacher considered the CTL time as dead time after the selecting had gone on. Little pro-active management

took place although sometimes reactive disciplinary moves were made. Passive management was in effect, however, as the teacher's eyes would be scanning the class "for trouble." The length of the CTL was dictated by how long it took the group to assemble unless there was a large class disciplinary issue. Seventy-five percent of the time the CTL constituted the whole transition in classroom A. This means a selection statement marked the beginning of the transition. In classroom B, the CTL was the whole transition 22% of the time (see Figure 1).

TABLE 6

THE CONTACT DURING THE CTL: PERCENTAGE OF THE TOTAL CONTACT CTL CONTACT

CLASSROOM	N(CTLs)	TYPE I	TYPE II	TYPE III
A	30	.35	.36	.29
B	29	.20	.35	.44

TYPE I: Teacher initiated disciplinary contact

TYPE II: Teacher initiated non-disciplinary contact

TYPE III: Student initiated to teacher contact

Following the part 2 intervention, the following analyses were derived as a comparison of part 1 (pre) and part 2 (post) data in classroom A, the experimental classroom. B's data remained significantly stable as stated earlier.

TABLE 7

PRE AND POST DATA FROM CLASSROOM A COMPARED:
LUMPED GROUPS

Part 1: CTL is whole transition .75%; CTL is embedded in transition .25%

Part 2: CTL is whole transition 87%; CTL is embedded in transition .13%

VARIABLE	T*	P>|T|	SIGNIFICANT/NONSIGNIFICANT
CTL	.35	.733	N.S.
PAT	-1.86	.089	N.S.
X SAT	-2.46	.031	SIG.
X CHUNK SAT	-4.30	.012	SIG.
WITHIN CTL:			
TYPE I CONTACT**	.34	.745	N.S.
TYPE II CONTACT***	.00	1.000	N.S.
TYPE III CONTACT	-3.53	.004	SIG.
WITHIN GROUPS:			
TYPE I CONTACT	-.088	.398	N.S.
TYPE II CONTACT	2.94	.012	SIG.
TYPE III CONTACT	1.29	.219	N.S.
PERCENT OF BREAKS	2.82	.037	SIG.

*matched pairs, unequal variance assumed N = 15 pairs

**12 pairs

***13 pairs

TABLE 8

MEAN AMOUNT OF SUSTAINED ACADEMIC TIME (SAT)
BEFORE AN INTERRUPTION

VARIABLE	$\Sigma \bar{X}$ PART 1 (PRE)	$\Sigma \bar{X}$ PART 2 (POST)
SAT	2:35	12:13
PERCENT OF PAT	.80	96.8

It is important to note that the time allottments stayed about the same for the CTL as well as for the small group lessons. The amount of SAT increased overall, total SAT sum as well as the mean chunk of SAT before a break. There were fewer breaks and more TYPE II contact. Other data reveal that there were more non-verbal disciplinary moves by teacher A in part 2 and likewise in classroom B, the teacher relied on more non-verbal signalling than in part 1. Presumably there was a shift from knowing the rules to following the rules. In addition, there was more moving around the classroom by teacher A in part 2 of the study. Teacher A began walking around the class to student desks during the CTL after the group members had been named and called to assemble. He also chose to respond to student-initiated requests. The class was somewhat noisier but more interactive.

Classroom B's classroom did not evidence the dramatic changes of classroom A. The comparison data from part 1 to part 2 remained essentially stable. There was a small downward shift in the summed mean of SAT and more breaks. However, the TOT remained in the high nineties.

These shifts were time limited and coincided with the absence of the teacher's aide due to illness, but the data affected the mean in a significant way. The student group TOT shifted from an overall mean percentage of 99.8 to 96.8.

Discussion

The most significant feature of the CTLs that distinguish them from other types of transition events is the goal of setting up a lesson. No matter what transpires in the normal flow of the CTL, the teacher sets up a context that steadfastly moves towards the lesson. Despite the fact that a CTL is a relatively short time span, these data lead us to suspect that these 2-5 minutes carry the enabling conditions for a small group lesson, and can also set up disabling conditions for a lesson. If the three factors of clarifying, selecting, and facilitating (described earlier) are included in the CTL, in some reasonable fashion, the lesson is enabled. If these functions are not addressed, the potential for a disabled lesson seems high. Students, as we know, are very clever about getting their needs met and are often very persistent in the pursuit of their goals and in the expression of their frustrations. A system set up to minimize facilitation of these needs does not eliminate them but directs them to unregulated places, according to this data. It seems that, within reason, the length of a CTL is less important than the carrying out of its function in the larger organizational context. Some systems can do things faster than others but efficiency here is not a matter of speed either of reducing--or, for that matter, increasing--the time. Using the CTL time <u>effectively</u> may very well be

integral to a high student TOT lesson; one with good sized chunks of SAT time. While this study was initially designed to provide basic baseline data about an understudied event, the CTL, the lesson to CTL relationship is certainly intriguing and bears further investigation. The change in classroom A from part 1 to part 2 were quite impressive.

The mean of chunks of SAT before a break jumped from two minutes thirty-five seconds in part 1 classroom A to twelve minutes fifty seconds in part 2. To us this looked like the difference between a lesson that was disabled to one that was enabled. The larger chunk of time on task offered more opportunity to focus and learn in a more sustained fashion. Intuitively we think that staccato pacing has drawbacks, but this hypothesis needs future exploration.

The primary contribution of this study is the baseline information about the CTL time. CTL activities set up lessons if they include clarification of the nature of the next event, selection of the lesson participants and the role of non-group members, and facilitation of student and classroom needs. CTL times do not need to be very long but need to be treated as actual events with borders and purpose. Once established at the beginning of the school year, patterns of classroom organization vis-a-vis the CTL seem to stay steady, although we saw some shift from overwhelmingly verbal signalling to the inclusion of more non-verbal signalling over time. This was a gradual process. A serendipitous piece of data was that the students could name the different features of their day despite the auditory part of the tapes being unaccessible. It seemed apparent that the "valuing" of the lesson as reinforced by the social organization of the classroom was reflected

in student language and attitude. Therefore teachers need to be vigilant about setting up "quiet" or other managerial goals above academic task accomplishments, but this is not a new story. What seems new is some evidence about the placement of that responsibility within a social organizational context. This author's contention is that transitions, usually an invisible piece of structure, are much more important than the amount of research they have generated might lead us to believe. Transitions are, after all, the most commonly occurring event in our lives and in the lives of classrooms.

Summary

More research is needed but these preliminary data are very suggestive of a very important function for CTLs, small chunks of transition time. Despite their relative invisibility they are not times of random activity as some literature would lead us to believe; they are not times to be rushed through nor are they dead time. They may be visualized as the warp upon which the patterns of the classroom are woven. As such they provide legitimate, perhaps critical, issues of concern.

The notion of a chunk of academic time that is sustained also poses some interesting questions. It indicates that using TOT as a summed measure of time on task may be missing a very important variable, a measure of focus. The nature of TOT is of central concern. In short, this study raises more questions than it answers but it is clear that the little event called CTL has more complexity and power than tradition would lead us to believe.

Notes

[1]The author, the subsequent non-participant observer, had spent four weeks in these teachers' classes the previous spring serving as an aide. This occurred after the teachers had agreed to participate in the larger study which began on day 1 of the following fall semester.

[2]Barnlund, Dean. Interpersonal Communication. Boston: Houghton Mifflin Company, 1957. Barnlund's theory of meaning is that meaning occurs between the parties involved--in their transaction.

[3]The December tape review was set up using the principles of behavior modification. Initially, goals were articulated by the teacher and the researcher and future activities related back to these goals. Teacher A wanted to refine his teaching. Specifically, he wanted to increase the amount of student on-task time in the small group lessons. The researcher wanted to gain more information about the CTL. Specifically, she wanted to standardize whatever change the teacher was willing to make. In other words, to make an agreement whereby the change would be stably implemented for three months (minimum). The change turned out to be that the teacher would include three factors in all his CTLs: clarifying the next events, clearly selecting the participants' roles, and facilitating students' and classroom needs. These factors are described more fully in the results section. A serendipitous happening provided interesting anecdotal data. Teacher A vigorously included "selecting" in a clear manner, sometimes included "clarifying" but did

not include the "facilitating" part. After about ten days, he reported frustration to the researcher about his groups still being staccato. An analysis of the tapes showed that he was not including one of the factors. When it was included, the student TOT increased dramatically.

[4]Teacher A's review of his tapes and implementation of a variation to his CTL pattern (established in part 1) provide very interesting data about the function of the CTL and their relationship to lessons.

[5]Matched pairs, unequal variance was assumed.

[6]LIFO Associates, Stuart Atkins, Inc., Beverly Hills, California, 1978 (Linda Haley, Consultant).

[7]In classroom A, the group lesson circle was assembled each day by students bringing their chairs to a table next to the teacher's desk, front and center; in B, the group area was pre-assembled at an area near the back of the classroom.

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